

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014486**Date Inspected:** 26-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

<b>CWI Name:</b>	Bernard Docena, Bnifacio Daquing, Jesse Cayabay			<b>CWI Present:</b>	Yes	No	
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006			<b>Component:</b>	SAS OBG		

**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified as 2W/3W-C, 1W/2W-E/D and the following observations were made:

**2W/3W-C**

Upon the arrival of the QA Inspector at the above identified weld joint it was observed and noted, the above identified weld joint appeared to be approximately 98% completed. The QA Inspector observed the approximately 380mm at the bottom of the weld joint which could not be reached by with the semi-automated bug-o track system.

The QA Inspector randomly observed the American Bridge/Fluor (ABF) welder Song Tao Hunag setting up to perform shielded metal arc welding (SMAW) of the 380mm of weld joint identified above. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Bernard Docena set the SMAW parameters prior to the ABF welder performing welding of the 380mm of the weld joint. The QA Inspector noted the ABF welder was utilizing 5/32" E7018 low hydrogen electrodes with 157 Amps. The QA Inspector noted the SMAW parameters appeared to be in general compliance with the contract documents. The QA Inspector randomly observed the ABF welder perform the SMAW root/fill pass for the remainder of the QA Inspectors shift.

**1W/2W-E**

The QA Inspector performed ultrasonic testing (UT) verification of the above identified weld joint. The QA Inspector noted the SE QC Inspectors Jesse Cayabay and Steve McConnell previously performed UT and located 5 total rejectable areas near the top and bottom of the weld joint. The QA Inspector noted the ABF is

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## WELDING INSPECTION REPORT

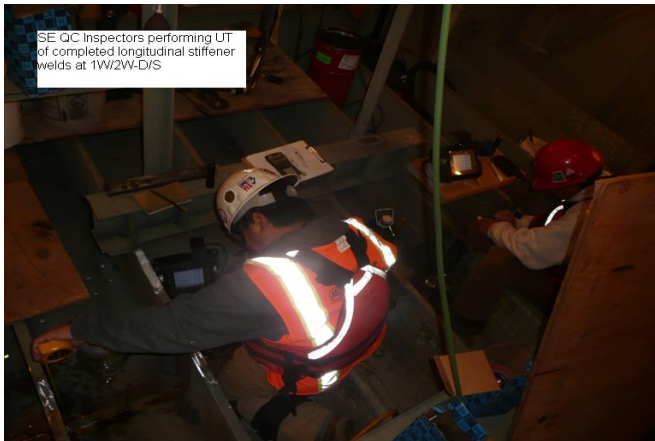
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actively performing the weld repairs currently. The QA Inspector took the opportunity to perform QA UT verification of a representative sample of approximately 10% of the total weld length. The QA Inspector noted no rejectable indications were located at the time of the testing. It was noted additional QA verification will likely be performed at random of the repair areas of the weld joint (see TL-6027 for additional information).

### 1W/2W-D/S

The QA Inspector randomly observed the SE QC Inspectors Jesse Cayabayab and Tom Pasqualone performing UT of the completed longitudinal stiffener welds. The QA Inspector noted the UT is in process. The QA Inspector noted the ABF welder identified as Chun Fai Tsui was performing pick up welding at areas previously indicated by the QC Inspector and performing additional grinding tasks of the weld access holes.



### Summary of Conversations:

The QA Task Lead Inspector Bill Levell informed the QA Inspector via email the ABF welders identified as Javier Arvizu ID 2603 FCAW-S and Xiao Jian Wan (ID 9677) are approved to perform welding on the project. The QA Inspector noted the ABF welders are qualified to perform FCAW-S in the 3G and 4G positions without the SPCM endorsement.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bettencourt,Rick	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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